Case-theory continued...

NPs are **assigned** Case by something (like θ-roles are assigned by verbs)

(1) **Case Filter** (stated as a condition on PF)
*NP if NP has phonetic content and has no Case.

- Finite Infl can assign subjective Case to NPs “in its vicinity” (subject)
- (Transitive) V assigns objective Case to NPs “in its vicinity”
- P assigns objective Case to NPs “in its vicinity”

(2) IP
   \[ \text{NP} \quad \text{I'} \quad \text{VP} \quad \ldots \]
   \[ \text{IP} \quad \text{VP} \quad \text{V'} \quad \text{NP} \quad \text{me} \]

(3) PP
   \[ \text{P'} \quad \text{NP} \quad \text{me} \]
   \[ \text{VP} \quad \text{V'} \quad \text{NP} \quad \text{me} \]

(4) CP
   \[ \text{C'} \quad \text{IP} \quad \text{I'} \quad \text{VP} \quad \ldots \]
   \[ \text{C} \quad \text{for} \quad \text{NP} \quad \text{me} \]
   \[ \text{I'} \quad \text{[–fin]} \quad \text{to} \quad \text{VP} \quad \ldots \]
(5) **Government**
\[ \alpha \text{ governs } \beta \text{ iff} \]
\[ \text{i) } \alpha \text{ is an } X^\circ \text{ category (that is, } \alpha \text{ is a head)} \]
\[ \text{ii) } \alpha \text{ c-commands } \beta \]
\[ \text{iii) Minimality is respected.} \]

(6) **C-command**
\[ \alpha \text{ c-commands } \beta \text{ iff} \]
\[ \text{i) the first branching node dominating } \alpha \text{ also dominates } \beta \]
\[ \text{ii) } \alpha \text{ does not dominate } \beta . \]

(7) **Minimality Condition**
In the configuration \([ XP \ldots X \ldots YP \ldots Y \ldots ZP \ldots ] \ldots \]
\(X\) does not govern \(ZP\).

(8) 
```
\[
\begin{array}{cc}
  & \alpha \\
\text{Spec} & \gamma' \\
  & \gamma \\
  & \beta \\
\end{array}
\]
```
\(X\) does not govern \(ZP\).
\(Y\) does govern \(ZP\) (it’s closer).

In English, there appears to be an additional constraint: 
*An NP can only receive Case if it is (string) adjacent to the Case-assigner.*

(9) a. *John makes frequently mistakes.*
b. John frequently makes mistakes.

Another thing that an adjacency requirement can explain is the order of the complements in ditransitive verbs:

(10) a. Mary gave the book to John.
b. *Mary gave to John the book.*

Here, the PP *to John* does not get Case from the verb, so it does not need be adjacent to it, but *the book* does get Case from the verb and *does* need to be adjacent to it.

[There remains the question of how in the dative-shifted cases *Mary gave John the book* how *the book* is getting its Case. There isn’t a very satisfactory answer to this at this point—Ouhalla basically suggests (following Chomsky 1981) that *give* has a primary]
Case to assign and a secondary Case to assign, and only the primary Case is subject to the adjacency requirement. We’ll assume this for lack of anything better, although we’d want to look into this more closely at some point down the road.]

Subjective case and Spec-Head agreement

The machinery we have built up so far still doesn’t explain why a finite Infl assigns Case to the subject position, however:

\[(11)\]

\[
\begin{array}{c}
\text{IP} \\
\text{NP} \\
\text{She} \\
\text{I} \\
\text{VP} \\
\text{...}
\end{array}
\]

Here, Infl governs VP, but does not govern the NP in its specifier.

Two approaches have been taken to this in the past:

- Redefine c-command such that Infl c-commands the NP too.
- Suppose that Infl assigns Case via a mechanism other than government.

A homework problem addressed the first approach, we’ll take the second approach.

Recall that earlier we found a connection between the subject position and Infl in terms of agreement—Infl is the home of agreement inflection (in English, the -s that appears on the verb with 3sg subjects), but it is sensitive to features in SpecIP.

We handled this in terms of Spec-Head agreement:

\[(12)\]

\[
\begin{array}{c}
\text{IP} \\
\text{NP} \\
\text{He} \\
\text{[3sg]} \\
\text{I} \\
\text{-s} \\
\text{[3sg]} \\
\text{V} \\
\text{V'} \\
\text{VN} \\
\text{P} \\
\text{eat} \\
\text{lunch}
\end{array}
\]

\[(13) \quad \textbf{Spec-Head Agreement}\]

A head (X°) and its specifier (SpecXP) must agree in relevant features.
We said that person, number, gender features (φ-features) were “relevant” in terms of agreement. We can add to that [subjective Case], which is “relevant” for Case assignment.

Issues of Objective Case

Ability to assign objective case turns out not to correlate with whether or not a verb selects (requires) a direct object.

(14)  
\begin{align*}
\text{a.} & \quad \text{The boy relies [PP on the girl].} \\
\text{b.} & \quad * \text{The boy relies.}
\end{align*}

Ouhalla uses the term transitive to refer to verbs which assign Case. In this sense, rely is an intransitive verb although it still requires an argument. In general, then, intransitive verbs cannot select an NP as its internal argument because it would not get Case.

Even similar verbs can differ on whether they assign Case or not:

(15)  
\begin{align*}
\text{a.} & \quad \text{I listened *(to) him.} \quad \text{\textit{listen}: intransitive} \\
\text{b.} & \quad \text{I heard him.} \quad \text{\textit{hear}: transitive}
\end{align*}

We also find examples where verbs assign Case to something which is not its argument at all: Exceptional Case Marking (ECM).

(16)  
\begin{align*}
\text{a.} & \quad \text{Mary believes [John to be intelligent].} \quad \text{\textit{Embedded subject gets}} \\
\text{b.} & \quad \text{Mary believes [him to be intelligent].} \quad \text{\textit{objective Case}} \\
\text{c.} & \quad * \text{Mary believes [he to be intelligent].} \\
\text{d.} & \quad \text{Mary sincerely believes [him to be intelligent].} \quad \text{\textit{Adjacency}} \\
\text{e.} & \quad * \text{Mary believes sincerely [him to be intelligent].}
\end{align*}

This is basically like our previous example:

(17)  
\[\text{[For him to leave suddenly] would be foolish.}\]

There, for assigns Case to him in SpecIP, and in (16), the root clause verb assigns Case.
(18) 

\[
\begin{array}{c}
\text{VP} \\
\text{V'} \\
\text{V} \\
\text{IP} \\
\text{believe} \\
\text{NP} \\
\text{him} \\
\text{I'} \\
\text{I}_{[-\text{fin}]} \\
\text{to} \\
\text{VP} \\
\end{array}
\]

The same thing is true of our small clauses too:

(19)  

a. Mary considers \[ \text{AP John [A} \cdot \text{intelligent}] \].  
b. Mary considers \[ \text{AP him [A} \cdot \text{intelligent}] \].  
c. * Mary considers \[ \text{AP he [A} \cdot \text{intelligent}] \].  
d. Mary sincerely considers \[ \text{AP him [A} \cdot \text{intelligent}] \].  
e. * Mary considers sincerely \[ \text{AP him [A} \cdot \text{intelligent}] \].

(20) 

\[
\begin{array}{c}
\text{VP} \\
\text{V'} \\
\text{V} \\
\text{AP} \\
\text{considers} \\
\text{NP} \\
\text{him} \\
\text{A'} \\
\text{A} \\
\text{intelligent} \\
\end{array}
\]

ECM verbs (like consider, believe) take an IP complement not a (nonfinite) CP complement. First, we can’t have that in the complement clause, and more importantly, the verb would not govern the embedded subject (due to Minimality) if there was a closer head. (Note: they can take finite CP complements, though: Mary believes that John is intelligent.)
Possessive Case and the DP hypothesis

“Subject” (specifiers) of NPs appear to receive possessive Case.

(22)  a. His house
     b. Mary’s translation of the book.

Where does this come from? It appears that complements of N can’t get Case from the N.

Remember how subjective Case comes about in clauses? It is assigned through Spec-Head agreement with Infl. The hypothesis we will pursue is that the possessive Case comes about through Spec-Head agreement with a similar functional category.

(23)  DP
     DP  D'
     [GEN]
     N'
     N  PP
     translation  of the book

D here is for Determiner; this is a Determiner Phrase. In a sense, we really expected this anyway, since determiners did not fit into X’-structures yet.

DPs have a structure very similar to that of clauses:
In sentences Infl carries tense features, but D does not carry tense features.

This gives us a way of analyzing gerundive phrases, which look like sentences but act like nouns:

(25)  a. [Mary’s watching TV] annoys her roommates.
     b. Her roommates are against [Mary’s watching TV].

(26)

Incidentally, pronouns (despite their name) are also of category D.

(27)

(28)  a. You politicians are all alike.
     b. We linguists know the truth.
     c. People trust us linguists.

The case of the whole DP is reflected in the form that the pronoun takes.
Ouhalla glosses over something which might be confusing—

- Under the DP hypothesis DPs receive Case (rather than NPs).
- The genitive (possessive) Case is assigned to SpecDP by Spec-Head agreement (D has a feature [GEN] which agrees with a genitive Case DP in SpecDP).
- The case of the whole DP, however, is reflected in a pronoun in D. (D has a feature [ACC] which reflects the case assigned to the whole DP).

I saw [DP Mary’s homework].

Here, Mary’s homework, the whole DP has accusative Case (cf. I saw him). Hence, D has an [Acc] feature (assigned by the verb to the whole DP). However, Mary’s (in SpecDP) has genitive Case (assigned by D via Spec-Head agreement). Hence, D also has a [GEN] feature.

It appears that in general, when D is spelled out as a pronoun, it can’t assign genitive Case (doesn’t have the [Gen] feature): *John admires Carol’s us linguists.

This is all a little bit murky, but it is worth pointing out that it is murky so when you read about it you don’t think you’re the only one who finds it murky.

Head-movement in DPs

In DP’s, D plays a very similar role to the one played by Infl in IPs. D has no tense, but it does have agreement. Assuming that person, number, and gender (ϕ-features) originate in D (like tense and ϕ-features originate in I for IP), we need to posit an operation like Affix Hopping to get them together by SS (surface structure).

Just like adverbs showed us that Infl lowers to V in English sentences, we can see from the positioning of adjectives and nouns that D lowers to N in English DPs:
(31)  
a. The army totally destroyed the city.
    b. * The army destroyed totally the city.

(32)  
a. The army’s total destruction of the city
    b. * The army’s destruction total of the city
    c. John’s unfounded allegations
    d. * John’s allegations unfounded
    e. People’s continuous donations to the fund.
    f. * People’s donations continuous to the fund.

(Also noteworthy is the fact that Case adjacency is not an issue in (32) because
destruction does not assign objective/accusative Case, even though Case adjacency
provides a separate means of ruling out (31a)).

Case and movement

DP-movement:

(33)  
a. John seems \[ IP t_i \] to be happy.
    b. It seems \[ CP that \[ IP John is happy \] \].
    c. * It seems \[ IP John to be happy \].

When we talked about (33a–b) before, we talked about the EPP (SpecIP must be
filled—sentences must have a subject). In (33a), John moves from the lower subject
position to the upper subject position because the upper subject position needs to be
filled. Another option to satisfy this is to insert the expletive it into subject position, as in
(33b), satisfying the EPP.

The question now is: What’s wrong with (33c)? The EPP should be satisfied for both
clauses, yet the sentence is ungrammatical.

What’s wrong is that the embedded clauses is nonfinite, hence Infl lacks Case assignment
features that are necessary to assign subjective Case to John. So, we end up with John left
without Case and thus in violation of the Case Filter.

In (33b), John gets Case because the embedded clause is finite (just as the subject does in
any finite sentence), and in (33a), John gets Case in the root clause, from the root clause
Infl (which is finite).

So, we have two reasons to move John in (33a):
    i) To satisfy the EPP, ii) to get Case on John.
In general, we like to avoid having redundant explanations for things, so people have argued for either dropping the EPP explanation (meaning that raising occurs solely in order to get Case on the DP) or dropping the Case explanation (meaning that raising occurs solely in order to satisfy the EPP, leaving some questions about (33c)). For most of the past 20 years, people have generally gone the first route, attributing movement to Case requirements, although very recently (within the last couple of years) the EPP explanation has been “making a comeback”— So the jury’s still out, but for concreteness, we’ll stick with the Case-based explanation:

- In raising constructions (e.g., *seems*) the DP moves because if it didn’t it would violate the Case Filter.

Passives and unaccusatives:

(34) [The book], was written $t_i$.

The standard analysis of Passive is that a passive verb (*was kicked*) cannot assign accusative Case. This would mean that the object would remain Caseless if it did not move to SpecIP to receive subjective Case via Spec-Head agreement with Infl.

So attaching passive –en/-ed to a verb removes the verb’s ability to assign accusative Case. It is sometimes said to “absorb” accusative Case.

Unaccusative verbs work the same way:

(35) [The vase], broke $t_i$.

Unaccusative verbs are those verbs which (surprise!) do not assign accusative Case, forcing the DP to look elsewhere (specifically, SpecIP) for its Case.

Notice also that both passives and unaccusatives do not assign an external $\theta$-role (if they did, the $\theta$-criterion wouldn’t be satisfied). There is a famous generalization about this called *Burzio’s Generalization*:

(36) **Burzio’s Generalization**

A verb (with an object) Case-marks its object iff it $\theta$-marks (i.e. assigns a $\theta$-role to) its subject.
The VP-internal subject hypothesis

We talked about this a little bit in class before, but now we can treat this a bit more seriously.

(37)  a. **All** the travelers should drink from the well.
     b. The travelers should **all** drink from the well.

In each case *all* (a “floating quantifier”) modifies *the travelers*. But how can it modify *the travelers* in (37b)?

The usual answer to this is that *the travelers* has moved away from *all* in (37b)—the idea is that the subject does *not* start in SpecIP, but actually starts in SpecVP and moves up to SpecIP:

(38)  a. 

```
      IP
     /   \   
    QP   I'  
   /   \        
  Q    DP     VP
  all  the travelers should  t_i
```

```
      V'  
     /   \  
    V    PP
  drink from the well
```

b. 

```
      IP
     /   \  
    DP   I'  
   /   \        
  the travelers   I  
       should    VP
```

```
      QP  
     /   \  
   Q    VP
  all  t_i
```

```
      V'  
     /   \  
    V    PP
  drink from the well
```

The reason the DP moves can be seen as the same thing that happens in passives and unaccusatives—Case is not available to a subject in SpecVP, and so it must move to SpecIP in order to get Case.

Incidentally: This means that V can only assign Case via government and Infl can only assign Case via Spec-Head agreement.
Doing it this way also means that the θ-roles assigned by the verb are all assigned inside the VP, the maximal projection of the verb itself. This is more intuitively appealing than the indirect θ-role assignment we needed to have when the subject was base-generated in SpecIP (and gives us a more principled way to answer the question “Why can the verb assign a θ-role to SpecIP but not to SpecCP?”)

Movement and chains

Movement of DPs, if we assume it is always motivated by Case, then takes place from a non-Case-marked position to a Case-marked position.

Similar to the θ-criterion, we can define a Case requirement on chains that goes like this:

(39) **Case Requirement**
A chain is Case-marked if it contains exactly one Case-marked position.

This actually allows us to simplify our grammar a little bit—recall:

(40) a. * John seems is happy
b. * [John], sees [τ, is happy].

Before, we ruled out this form of NP-movement (now DP-movement) because it was movement out of a “Tensed S” (a finite IP). However, we can now see the problem in terms of the subject John receiving Case twice—because finite Infl assigns Case to its specifier, John gets Case once in the embedded clause, and then gets Case again from the finite Infl in the root clause. So: We no longer need the TSC—The Case Requirement (a more general constraint) subsumes it.

In general, A-chains (argument chains) have a non-Case-marked position at their base and a Case-marked position at their head. Similarly, the generally have a θ-position at their base and a θ′-position at their head. With respect to arguments, the θ-role is assigned to the tail of the chain and the Case is assigned to the head of the chain.

As for wh-movement and Quantifier Raising, these are not movement to a Case position—in fact, they are generally movement from a Case position.

(41) a. What did John see τ?
b. John suspects everyone.
b′. LF: [IP [everyone], [IP John suspects τ]]

This still satisfies the Case Requirement—only one Case is assigned, just at the bottom.